

## FURTHER NOTES ON HUMMING-BIRDS.

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## THE GENUS CYANOLESBIA.

SINCE the *Catalogue of Birds*, Vol. XVI., appeared, there have been several articles on the genus *Cyanolesbia*, one of the finest if not the most brilliant of all the genera of Humming-Birds. In 1892 Count Berlepsch gave excellent notes on the various forms in the *Journal für Ornithologie*, and described two new forms, *C. emmae* and *C. caudata*. In 1893 Boucard "proposed" eventually the names *C. meridana* for *C. caudata*, *C. columbiana* for *C. emmae*, thus creating two unnecessary synonyms. In 1894 I gave a review of the genus in *Nov. Zool.* Vol. I. p. 47, recognizing the following forms:—

1. *C. griseiventris*; 2. *C. mocoa*; 3. *C. mocoa smaragdina*; 4. *C. emmae*; 5. *C. gorgo*; 6. *C. gorgo margarethae*; 7. *C. coelestis*; 8. *C. caudata*.

In 1897 (*Ibis* p. 423) I confirmed my view of 1894, adding that I was inclined to regard forms 4, 5, 6, and 8 as only subspecifically related. In the same year (*Nov. Zool.* Vol. IV. p. 529) I adopted the name *kingi* for *gorgo*. This had already been done in the same year by Mons. E. Simon, who (*Cat. Trochil.* p. 34) recognized the following forms of *Cyanolesbia*:—

1. *C. kingi*; 2. *C. kingi margarethae*; 3. *C. kingi caudata*; 4. *C. kingi mocoa*; 5. *C. kingi smaragdina*; 6. *C. kingi emmae*; 7. *C. coelestis*: while he removed *Cyanolesbia griseiventris* to the genus *Polyonymus*, the type of which was *caroli*.

I believe that this treatment of the genus is perfectly correct. *C. griseiventris* cannot possibly be retained in *Cyanolesbia*, the long, straight, pointed and strong beak, the great width of the rectrices, the style of coloration of both sexes, bringing it naturally together with *caroli*. This view was also strongly held by Mr. Baron, who, from observing and collecting both genera frequently, told me (*in litt.*) that *C. griseiventris* was no *Cyanolesbia*, but belonged to another genus.

As a new species must be added

***Cyanolesbia berlepschi* Hartert.**

This most beautiful species of the genus has been briefly described in the *Bull. B. O. Club*, November meeting 1898. It differs from its nearest allies, *C. kingi kingi* and *C. kingi margarethae*, as follows:—

The colour of the upperside is darker than that of *C. k. margarethae*, but not as dark as it is in *C. kingi kingi*, although that varies to a certain extent. The tail is longer, the rectrices wider, the outer being 155 mm. long and 10 mm. wide towards the tip. They become distinctly wider from where they pass beyond the next pair, while in all the other forms they taper slightly towards the tip. The colour of the rectrices is nearest to that of *C. kingi margarethae*, but even slightly more greenish purplish blue: the middle rectrices, however, are not greenish for their exposed portions, but purplish blue, with only a green tinge at the tips. The blue spot on the throat is larger than usual in any *C. kingi*. The *female* differs

from all its allies in being beneath **white**, not rusty rufous (the term chestnut used by Mr. Salvin is misleading). In view of the peculiar form of the tail, which is already clearly developed in very young *males*, and the quite singular coloration of the *female*, *C. berlepschi* must stand as a species, to which there are evidently no approaches in the nearest allied forms.

I have again named this fine bird in honour of Count von Berlepsch, in thankfulness for his having introduced me into the study of the *Trochilidae*, and for his constant willingness to lend material for study from his fine collection of Humming-Birds, and to give advice in difficult questions, from his unrivalled store of knowledge of the prettiest and in many respects most fascinating family of birds.

*C. coelestis* may, I believe, also be kept specifically distinct, the somewhat longer bill, brownish underside, and the coloration of the *female*, which has the breast white and only the abdomen rusty rufous, while in *C. kingi* and its allies the abdomen and breast are rusty rufous and the throat only white, with green discs, being good characters for its distinction.

*C. mocoa*, which inhabits the eastern slopes of the Andes in South Colombia and Ecuador, differs merely from *C. emmae*, which is evidently an inhabitant of the northern slopes ascending from the Magdalena Valley to the eastern ranges of the Andes, in having the tail of a darker, less shining green, the bill generally, but not always, about 1 mm. longer, the throat with a large blue spot. This spot is mostly absent in *C. emmae*, but I have already seen four specimens of the latter which have a more or less extended blue spot on the throat. The *females* are probably alike, as different forms have never been noticed in Bogotá collections, and the *females* of *C. kingi kingi* and of *C. mocoa* do not differ from each other in any appreciable characters.

*C. emmae* is no doubt more distinct from *C. kingi kingi* than *C. mocoa* from *C. emmae*, the longer bill, the green tail, and the absence of the blue spot being excellent characters to distinguish it. I must also admit that I have not seen perfectly intermediate forms, but, on the other hand, the colour of the tail in *C. kingi kingi* varies in a large series and is sometimes less purplish blue and more of a steely greenish blue gloss, even on the outermost long tail-feathers. We have already seen that the blue spot is sometimes, though rarely, present in *C. emmae*. The longer bill is not a character of specific, but rather of subspecific value. The *females* are not known for certain, but it is most probable that they do not differ materially from those of the true *kingi*. It seems, therefore, quite reasonable to regard *C. emmae* as a subspecies of *kingi*. That the two forms, *kingi* and *emmae*, represent each other in different parts of Colombia can hardly be doubted.

*C. caudata* Berlepsch is a most distinct form, inhabiting the Andes of Venezuela, from where Messrs. Briceno Gabaldón & Sons have sent fine series for years. In about a hundred adult *males* which I have seen in the collections of Messrs. Rothschild, Simon, Boncard, and Count Berlepsch I have not seen one with even an indication of a blue spot on the throat. The tail also is generally considerably longer, the bill usually shorter. The *female* does not differ from that of *kingi*, except by a generally shorter bill. As we have seen that the blue throat-spot is not invariable in its absence and presence in allied forms, as the *females* do not differ materially, and as the shorter bill and longer tail can hardly be considered more than subspecific characters, I do not hesitate to look upon *C. caudata* also as a subspecific form.

The same may be said of *C. margarethae*, a form which inhabits the coast mountains from Caracas to Puerto Cabello. *C. margarethae* differs only from *kingi* in its less deep green colour of the upper parts, and often of the under surface as well, and generally very much more green colour of the central rectrices. There are, however, specimens from Bogotá which cannot be distinguished except for the darker colour of their upper surface. The *females* are alike. This form is therefore only a subspecies, and has been quoted with trinomials by Count von Berlepsch, although its home is far more distant from that of *kingi* than that of *caudata*, which lives between *kingi* and *margarethae*.

*C. kingi kingi*, as I call the Bogotá form with the outer elongated rectrices blue, varies considerably in the amount of green and purple on the central rectrices, these being as purplish blue as in the outer pair, or about as green as in *C. kingi margarethae*; but these various varieties of *C. kingi kingi* run completely into each other and probably come from the same countries. The exact range of *C. kingi kingi* is not yet known, but it certainly lives in the environs of Bogotá.

The status of the genus is thus, after removal of *griseiventris*, as follows:—

1. *C. kingi kingi* (Less.). Andes of Colombia. Very common in Bogotá collections. Exact range not known, but found near Bogotá from 8000 to 9000 feet.
2. *C. kingi emmae* Berlp. Andes of Colombia. Much rarer in Bogotá collections, and only more recently found in numbers. Probably inhabiting the northern portions of the slopes ascending from the Magdalena River to the eastern range of the Andes.
3. *C. kingi moroa* (Del. & Bourc.). Eastern slopes of Andes in the southernmost parts of Colombia and Ecuador.
4. *C. kingi smaragdina* (Gould). Bolivia and southernmost parts of Peru.
5. *C. kingi margarethae* (Heine). Coast mountain-ranges of Venezuela (Caracas, Cumbre de Valencia).
6. *C. kingi caudata* Berlp. Andes of Venezuela.
7. *C. coelestis* (Gould). South-Western Colombia and Ecuador.
8. *C. berlepschi* Hart. Hills of Cumana, Venezuela.

#### THE GENUS FLORISUGA AUCT.

I agree with E. Simon that this genus is best placed near *Eupetomena*. The slightly curved bill is similar. *F. mellivora*, the "type" of the genus, is one of the oldest and best known Humming-Birds. Linné, in 1758 (tenth edition), named it *Trochilus mellivorus*. From the synonymy in the *Cat. Birds Brit. Mus.* XVI, p. 329, it would seem that Linné, on the same page where he enumerated the bird under the same name in 1766 (twelfth edition), called it also *Trochilus fimbriatus*; but he did no such thing, this name being created more than twenty years later by Gmelin. Salvin must have copied the mistake from Elliot. Salvin also describes the *male* as having the middle rectrices bluish green, but they are all white, and what he thought to be the middle rectrices are the two longest upper tail-coverts. This peculiar character, viz. the elongation of the tail-coverts and their assimilation in shape to the rectrices, is very remarkable, and, in addition to the difference of the plumage of the sexes, only found in *F. mellivora*, but not in *F. fusca*. It is therefore only consistent with the universal custom of dividing the *Trochilidae* into many genera to accept the genus *Melanotrochilus*, as differing

from *F. mellivora* in the normal size and shape of the upper tail-coverts and in being similarly coloured in both sexes.

*Ornismya nigra*, Bonaparte, *Consp.* I. p. 81, cannot be quoted as a synonym of *Florisuga fusca*, as anybody can convince himself by looking up the place and comparing the references quoted by Bonaparte.

The name *Florisuga sullei* Boucard (type compared by me) is given to a specimen with a more golden upperside and greenish blue head. The "type" is a somewhat immature bird. I have seen and have now before me several similar specimens. They are mere individual varieties; the greenish blue is, I think, due to immaturity.

#### THE GENUS POLYERATA HEINE.

I believe that E. Simon, *Catalogue des Trochilides* p. 11, did right in placing *Polyerata* close to *Aggyrtia*, from which, he says, it differs only in the widely different coloration of the sexes. This character, however, cannot be sufficient for generic separation, unless it is accompanied by some structural peculiarities. Such I cannot find, and therefore I unite *Polyerata*, as well as *Arini c.*, with *Aggyrtia*.

*Polyerata*, or rather *Aggyrtia amabilis*, is a common species, and extends from Costa Rica to Northern Ecuador. **Within this area** we have now a number of differentiated local forms, recently described as species, though two of them may be only of subspecific value. In Chiriqui we find on the mountains a form of larger dimensions and with somewhat duller middle rectrices. It has been described as "*P. decora*" by Salvin in 1892. Then in 1895 Mr. H. W. Rosenberg discovered on the Rio Dagua in West Colombia a fine new species, described in the same year as "*P. rosenbergi*" by Boucard. It differs from *A. amabilis* in the absence of the glittering green shield on the top of the head, and in the position of the blue breast-band which covers the upper part of the breast, while in *A. amabilis* it does **not** cover the real breast, as Mr. Salvin wrongly describes it in *Cat. B. Brit. Mus.* XVI. p. 238, but the lower throat and crop-region. *A. rosenbergi* is further distinguished by its pure white under tail-coverts, longer bill, shining green throat and chin, and other less important characters. This excellent species has also been found by Mons. Simon in Bogotá collections.

In 1897 Count Berlepsch described again a "*P. reini*," from an uncertain place in West Ecuador. He says that it differs from "*P. rosenbergi*" in having the throat golden green, a smaller blue band across the breast, longer beak, and almost pure steel-blue lateral rectrices. I have seen the type, most kindly lent me by the author; and Mr. Rosenberg, during his second trip to South America, has collected two *males* and a *female* at Cachaví, which I identify with the form named "*P. reini*." I am of opinion that the golden colour of the breast in the type-specimen is due to some external process, as so often happens, and that the blue of the breast being less extended is due to the imperfectness of the plumage on the type-specimen; but the almost pure blue lateral rectrices and the generally 1 or 2 mm. longer beak seem to be good characters to distinguish this form as a subspecies of *A. rosenbergi*. *A. amabilis* should also be more studied with regard to its local variations. Specimens from Esmeraldas and the Balzar Mountains seem to have a less extended blue breast-band, others from Ecuador have darker and more purplish upper tail-coverts and middle rectrices, than those found in the Bogotá collections. A greater material, however, is desirable before conclusions are drawn.

**Amazilia fuscicaudata** (Fras.) = **A. riefferi** (Bonre.).

Mr. Salvin, in *Cat. B. Brit. Mus.* XVI. p. 217, has asserted that "his series (about ninety specimens) shows on the whole that this species is very constant throughout its range, and exhibits no localized races that I can trace." It is true that the enormous series of ninety specimens in the British Museum is less instructive than the much smaller one now in Mr. Rothschild's Museum, because those ninety are mostly from Central America; nevertheless the long bill in the Esmeraldas skin might have been noticed. As it is, the birds from South-West Colombia and North-West Ecuador (and probably from other places along the coast), of which I have before me a fine series from Rio Dagua, Paramba, and Chimbo, differ materially from *Amazilia fuscicaudata fuscicaudata* from the Bogotá range of mountains, and the Andes of Ecuador and Santa Marta, in their conspicuously longer beak, paler abdomen, and generally lighter under tail-coverts. Had Mr. Salvin been aware of these differences he would probably have allowed specific rank to the western form, but I prefer to call it *Amazilia fuscicaudata jucunda* (Heine). Although Heine was no doubt right in distinguishing this form, I cannot follow him in his views about the distinctness of *suavis*. Heine often judged from a very small and insufficient series, and sometimes regarded individual characters as specific ones. He and Cabanis considered the colour of the bill in these birds to be of importance for distinguishing different species, while Salvin says that the *male* has the maxilla flesh-colour with the tip only black, the *female* has the maxilla blackish with only the base flesh-colour. Salvin's explanation is not borne out by the birds collected and dissected by Rosenberg, which are evidently properly dissected, as the skins marked "♂" by him have invariably longer wings than those marked "♀." On the other hand, there are specimens with mostly flesh-coloured beaks and others with mostly black ones from the same localities before me, although it is true that more of the birds from West Ecuador and most of those from Central America have dark maxillae, while those from Bogotá have them nearly all reddish with the exception of just the tip. There seems to be no doubt that the dark-billed birds are younger individuals. Central-American birds, at least those from north of Panama, have generally longer wings and often a more golden gloss on the rump, and might form a subspecies *A. f. dubusi*. The difference, however, is very slight. The *female* is like the *male*, except that the wing is about 2 or 3 mm. shorter and the green on the throat-feathers is less extended, so that more of the basal light greyish or whitish colour appears there.

One skin is before me from the Andes of Merida, sent by S. Briceño Gabaldón in 1897, whose hunters shot at an elevation of about 2000 m. in May. It does not differ materially from Bogotá skins, but the locality is, I believe, new.

The name *A. fuscicaudata* is the oldest. The type in the Liverpool Museum is from Bogotá, but in the original description "Chachapoyas, Peru," was given by mistake. No such bird has ever been found there, and the description, although not very good, agrees with the type, which I consider undoubtedly to be the type.

**Chrysuronia oenone and subspecies.**

The type is said to be from "Trinidad," but came perhaps, like most supposed Trinidad birds, from the mainland of Venezuela. Count Berlepsch separated *Chrys. oenone longirostris* from Bogotá. The only difference of this form is the very slightly longer bill of most specimens—a peculiarity of a great many Bogotá forms.

Bourcier & Mulsant described *Ornismya josephinae* with shorter wings and an entirely green underside. This is a very constant form in Eastern Bolivia and other places, but on the Upper Amazons, especially near Pebas, specimens are common with only a blue chin, and transitions occur between this blue-chinned form and *C. oenone oenone* with the entire throat blue on the one hand, and *C. josephinae* without any blue on the other hand. This blue-chinned form has been distinguished as a third species by Boucard, but unfortunately he applied the names *neera* and *josephinae* to this form and named the true *josephinae* once more, calling it *buckleyi*. The former has no name, and I propose for it *intermedia*, nom. nov.

Salvin's treatment of *C. neera* and its forms contains some inconsistencies. First of all he accepts the name *neera*, which is a "nomen nudum." In the *Rec. Zool.* 1839, p. 18, it is only quoted from an unpublished picture-book, and all that is said about it is, "M. De Lattre indique Guaduas, dans la Colombie, pour la patrie de cette belle espèce." On account of this most authors have avoided this name. Now Salvin—against his usual custom—has accepted this quite unacceptable name. Whether the supposed type of "*neera*" in the British Museum is the type has never been proved. The Colombian form should be *C. oenone oenone* or *C. oenone longirostris*, and not *neera*. It is also quite in contradiction to Salvin's rule to accept *neera* as a species, as he admits that it is connected with *oenone* by transitional specimens—a reason for which he usually unites the forms which are thus connected.

According to my views the three forms should be treated as follows:—

1. *Chr. oenone oenone* (Less.). Longer wing, blue throat. Venezuela to Eastern Ecuador.

2. *Chr. oenone longirostris* Berlp. Exactly like 1, only bill generally 1 to 2 mm. longer. Eastern ranges of the Andes in Colombia.

3. *Chr. oenone intermedia* Hart. Wing shorter, chin only blue. Upper Amazons.

4. *Chr. oenone josephinae* (Bourc. & Muls.) (synonyms: ?*neera* 1839, nom. nud., *caeruleicapilla* 1861, *buckleyi* 1893). No blue on chin and throat, wing shorter. Plains of Bolivia.

### *Chrysuronia ruficollis* anct. recentium.

For a long time this bird has been known as *Chrysuronia chrysuria*, until Berlepsch has shown that *Trochilus ruficollis* Vieillot, based on the *Picaytor cola de topacio* of Azara, is this species. It has since been correctly named *Chrysuronia ruficollis*, but there is no reason for separating any species of the genus *Chrysuronia* from *Hylocharis*, except *Chrysuronia oenone*, which has a harder bill and a differently shaped tail, in which the outermost rectrices are longest.

Comparing specimens from Rio Grande do Sul and La Plata, which, according to Berlepsch (*J. f. O.* 1887, p. 18) do not differ from those from Paraguay, with a series collected by Mr. Arthur Maxwell Stuart in the plains near Reyes on the Rio Beni in Eastern Bolivia, I find that the latter have a remarkably shorter bill and are generally a little smaller. I find it therefore necessary to separate the latter as

### *Hylocharis ruficollis maxwelli* subsp. nov.

(See the forthcoming Tierreich, *Trochilidae*.) Specimens from Mato Grosso are perhaps somewhat intermediate in size.

## THE GENUS HYLOCHARIS.

Mr. Salvin, *Cat. B.* XVI. p. 245, enumerates three species: *H. sapphirina*, *cyanea*, and *lactea*. Of these *lactea* must be excluded, as it is an *Agyrtria*; but "*Chrysoronia ruficollis*" and *cliciae* must be united with *Hylocharis*, as in structure of the bill and shape of tail they belong here, and not to *Chrysoronia*, where most authors have placed them on account of the brilliant colour of their tails. (Cf. Simon, *Cat. Trochil.* pp. 15, 16, 1897, and about *lactea* Berlepsch *in litt.* 1896.)

*Hylocharis sapphirina* is not a very variable species, but specimens from Guiana are of a deeper, somewhat more bluish and less golden green, and their central rectrices are generally less brilliant, though this latter character is suspicious, as it is also peculiar to young birds. Boucard called this race *guianensis*. He also described as a species a *H. brazilensis* (*Humming Bird* III. p. 7), from a skin with greenish blue breast; but this is evidently an individual aberration. Salvin's description of *H. sapphirina* is not exact; the colour of the rectrices is not "rich bronze," and they have dark edges.

*H. cyaneus* (*Trochilus cyaneus* Vieillot) seems to be separable in three subspecies:—

a. *H. cyaneus cyaneus*. Rump with a strong coppery gloss, abdomen mixed with grey, under tail-coverts not pure blue, back lighter green. Bill 16—17 mm. *Hab.* Brazil.

b. *H. cyaneus rostrata* (Boucard ex Berlepsch MS). Bill 18—20 mm. Head and throat of a somewhat lighter, less reddish blue, less coppery on back and rump, abdomen deeper green. E. Peru (Rioja) and Bolivia (Rio Beni, from where Mr. A. Maxwell Stuart sent us a small series).

c. *H. cyaneus viridiventris* Berlp. Differing from *H. cyaneus cyaneus* in about the same way as *H. sapphirina guianensis* differs from *H. sapphirina sapphirina*. Bill 15—17.5 mm., back without any coppery tint.

## THE GENUS EULAMPIS.

This genus contains only two species in the *Catalogue of Birds*, but *C. chlorolaemus* is evidently well distinguished from *E. holosericeus* by its darker and duller green throat and larger and deeper blue patch on the breast. It is at present only known from Grenada, the original locality being erroneously given as Nevis. The female has a longer and slightly more curved bill, and it is Gould's *longirostris*.

Both *holosericeus* and *chlorolaemus* differ from *jugularis* in their distinctly rounded tail, with the outer rectrices shorter, and their comparatively longer bills, which are about one-third of the length of the wing, while in *jugularis* the bill is about one-fourth of the length of the wing; and the wings of *holosericeus* and *chlorolaemus* are brownish black, as in nearly all Humming-Birds, while they are bright glossy metallic green in *jugularis*, in strong contrast to the velvety black glossless back. It is therefore in accordance with the usual genus-splitting among the *Trochilidae* to separate the former two generically from *Eulampis*, and there is (as usual) a *Reichenbachian* name (*Sericotes*) available for this purpose.

Count Berlepsch (*Ibis*, 1887, p. 294) has separated two specimens supposed to be from Nevis (*vide* Whitely!) under the name of *eximius*. Their characters are a longer bill, greener crown, and shorter wing; but these characters are those of the female sex, and Berlepsch's *eximius* is therefore evidently the female of *jugularis*.

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